

2040 Freight: Our 2040 Portland Freight Plan



Portland Freight Committee 02/04/21



PBOT
PORTLAND BUREAU OF TRANSPORTATION

The 2040 Portland Freight Plan is about planning how to move goods through the city while meeting our goals for a safe multimodal system that supports economic prosperity, human and environmental health, equity, and resilience.

Today

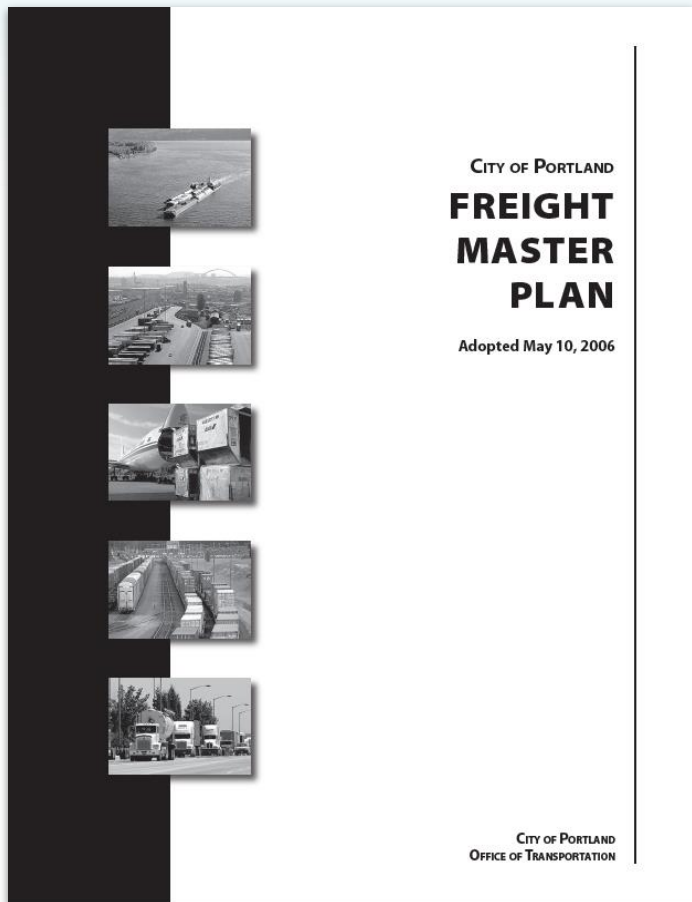
1. Overview of freight in Portland in 2021
 - Employment in freight dependent industries
 - Commodities that are moved
2. Conditions for truck movement
 - Including volumes
 - origins and destinations
 - travel sheds/ speeds
3. Last mile delivery
4. Delivery during Covid
5. Questions + discussion



Overview of Freight in Portland



2006 - 2022



Employment in Freight Dependent Industries

Industry	Portland			Oregon		
	2015	2019	Change	2015	2019	Change
Retail trade	34,528	34,162	-1%	215,805	238,669	11%
Manufacturing	30,161	33,806	12%	204,094	226,458	11%
Construction	12,913	14,600	13%	99,157	129,498	31%
Transportation and warehousing	10,114	16,083	59%	59,158	78,293	32%
Wholesale trade	10,083	8,792	-13%	51,908	53,285	3%
Agriculture and mining	2,149	2,489	16%	60,535	59,775	-1%
Utilities	2,364	2,623	11%	14,566	15,903	9%
Other employment	221,466	260,422	11%	1,084,584	1,243,457	15%
TOTAL EMPLOYMENT	323,832	372,977	15%	1,789,807	2,045,338	14%



Commodity Forecast Portland Region – All Modes

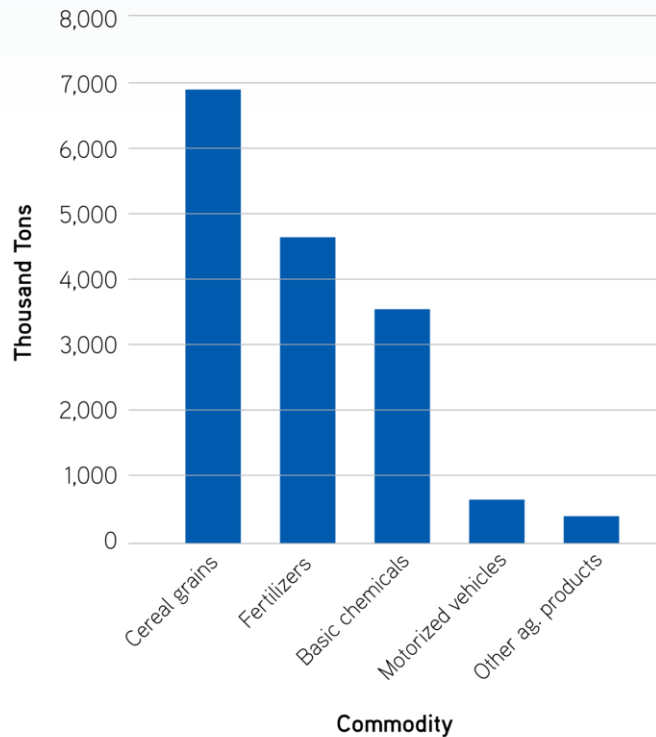
	2015		2018		2040	
	Thousand Tons	Million Dollars (\$)	Thousand Tons	Million Dollars (\$)	Thousand Tons	Million Dollars (\$)
Total Origin	79,518	120,799	90,063	127,564	122,176	246,753
Total Destination	88,238	110,181	102,444	117,482	134,586	210,781
Total Flow	167,756	230,980	192,507	245,046	256,762	457,534
% Growth	-	-	15%	6%	53%	98%
Total Imports	2,927	11,603	3,321	13,163	9,762	39,456
Total Pass-Through Imports	1,032	6,233	1,127	6,568	4,195	12,923
Total Exports	9,078	6,108	16,125	7,955	27,963	29,010
Total Pass-Through Exports	2,718	1,994	4,351	2,755	6,839	4,710

Freight Analysis Framework, USDOT

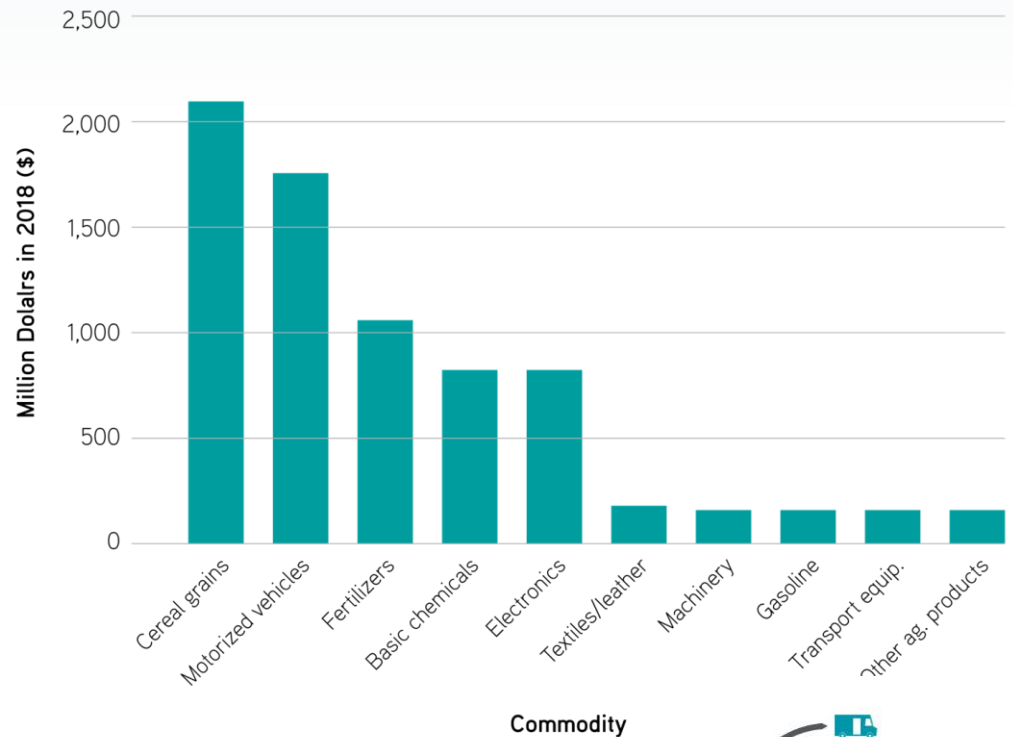


Top Exports

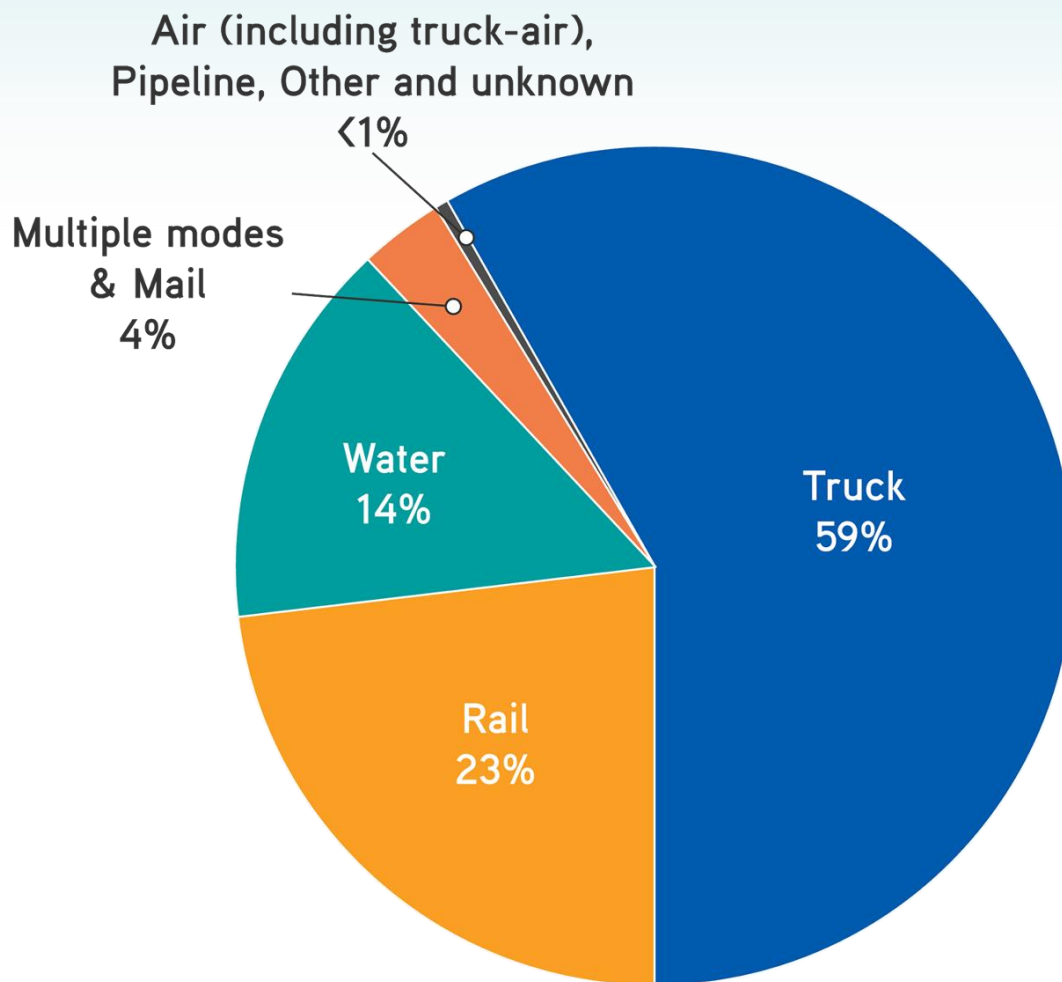
By Tonnage



By Value



Domestic Modes of Exports by Tonnage



Trucking in Portland

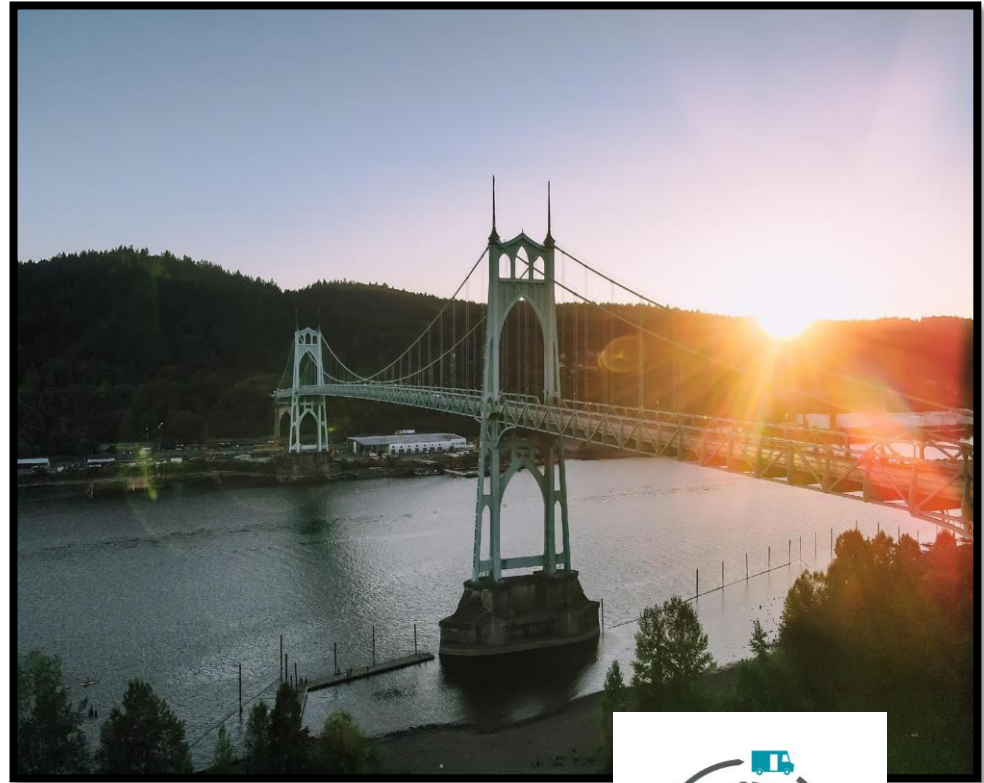




Portlandoregon.gov/transportation

Methods Used to Identify Traffic Volumes and Speeds

- Metro Regional Demand Model
 - Base year 2015
 - Off Peak (12-1 p.m.)
 - Peak hour (4-5 p.m.)
- Volume count data
- HERE speeds



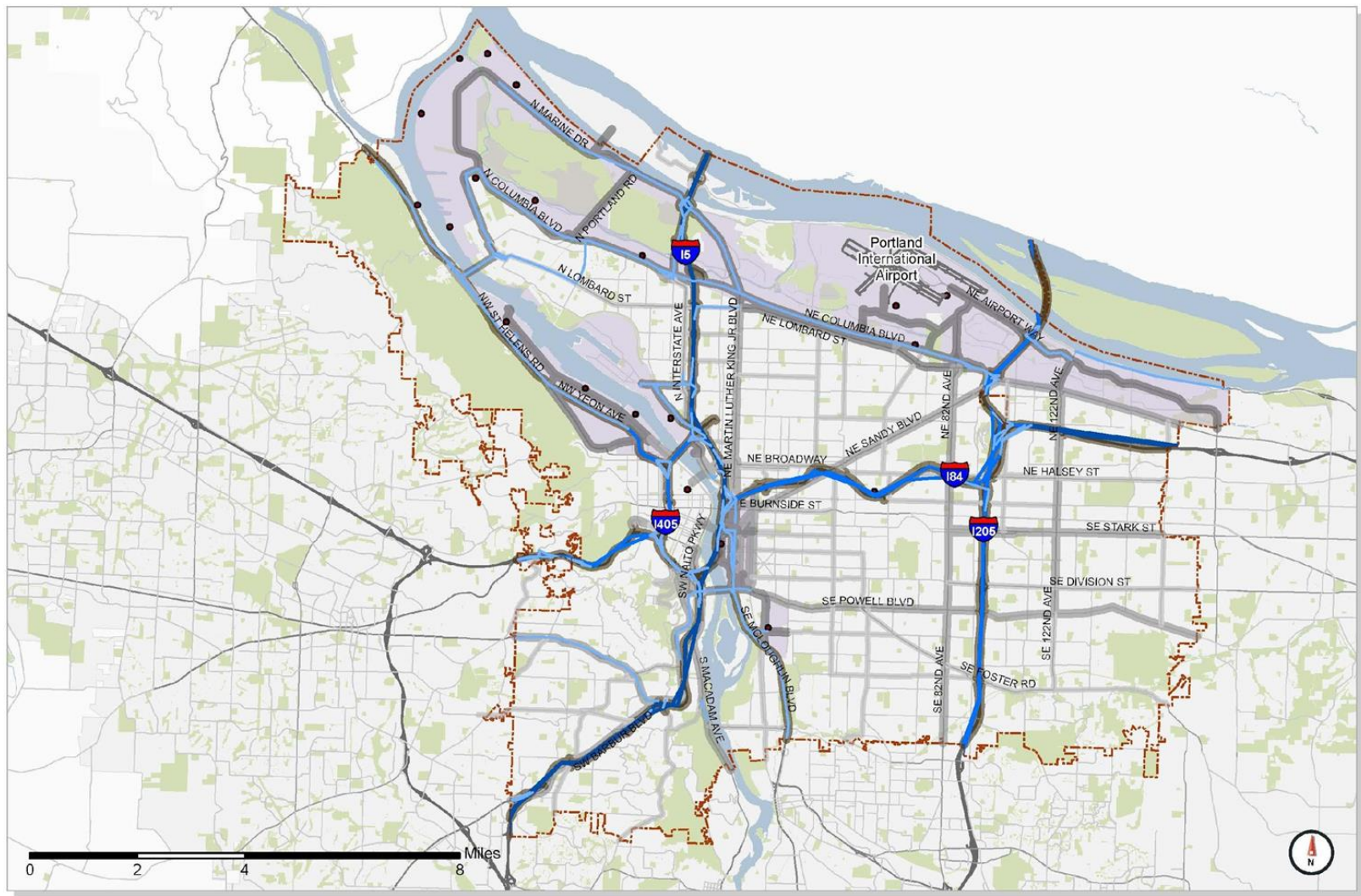


Figure 3-3

Off-Peak Hour Truck Volumes

Local Truck Access Streets with more than 20 trucks/hr

Peak and off peak

- **SE Milwaukie Ave** (SE Powell Blvd - Holgate Blvd)
- **SW Naito Pkwy** (Barbur Blvd - Ross Island Bridge)
- **N Portsmouth Ave** (N Lombard St -Columbia Blvd)
- **NE Marine Dr** east of N MLK Jr Blvd

Off peak

- **NE Lombard Place** (NE Lombard Street- NE Columbia Blvd)

Peak

- **W Burnside Rd** (western City boundary - I-405)
- **SW 30th Ave** (Beaverton Hillsdale Hwy - SW Vermont St)



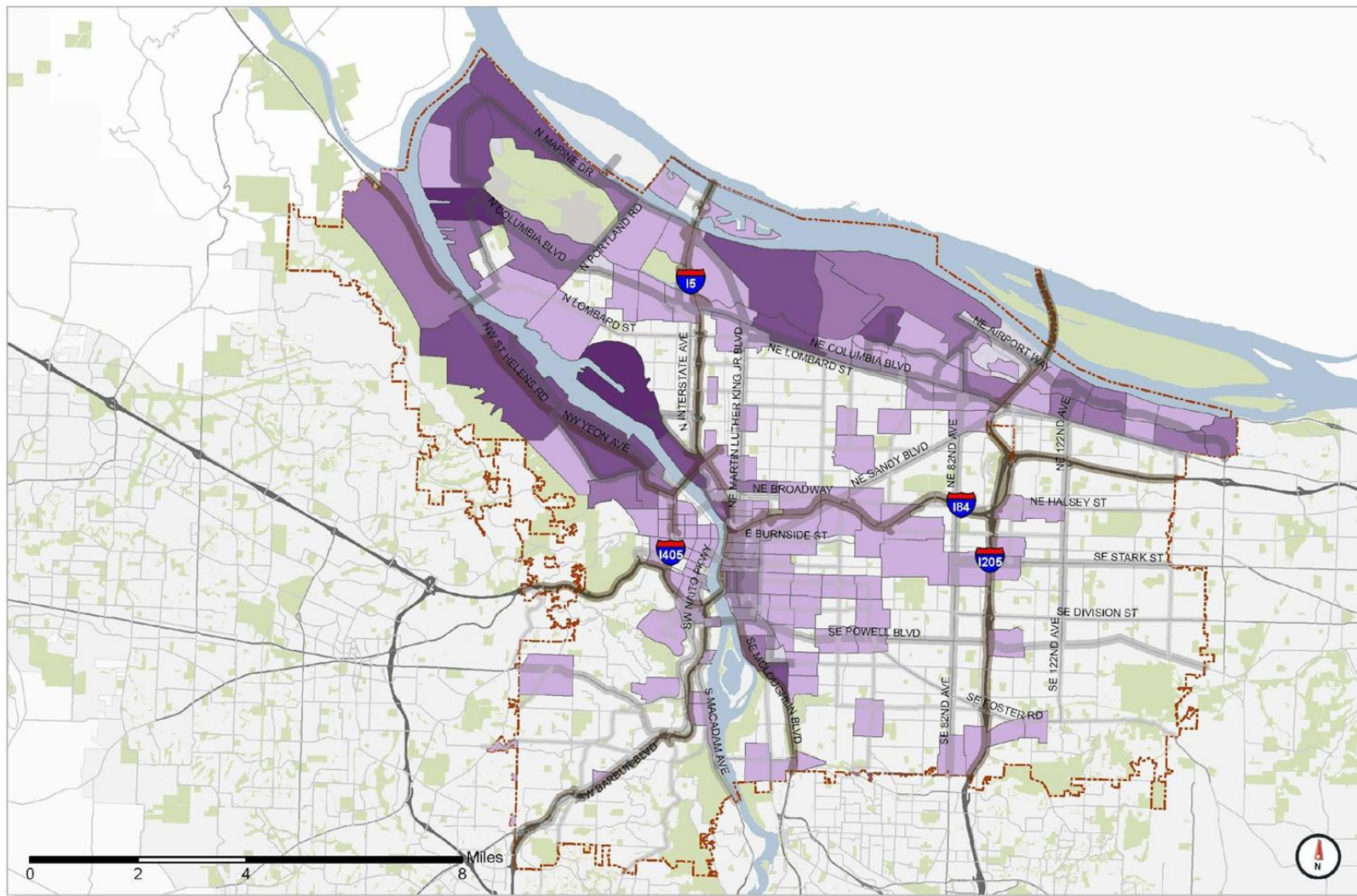
Streets With Over 20% Trucks

Model and truck count

- **N Marine Drive** west of NE Martin Luther King Jr Blvd
- **N Lombard Street** west of N Philadelphia Ave
- **N Columbia Blvd** west N Portland Rd
- **NW St Helens Rd** west of the St. Johns Bridge

Count data

- **NE 33rd Ave** north of NE Prescott St
- **NE Martin Luther King Jr Bvd** north of NE Vancouver Way
- **NE Marine Drive** east of I-205
- **SE 122nd Ave** between NE Halsey St and NE Glisan St
- **NE Basin Ave**
- **N Channel Ave**



Daily trucks

- 0 - 20
- 21 - 200
- 201 - 500
- 501 - 1500
- 1501 - 3221

Freight Routes

- Regional Truckway
- Priority Truck Street
- Major Truck Street
- Truck Access Street

 Portland
 Parks
 Metro Area

Figure 3-17

Daily Truck Trip Origins/Destinations

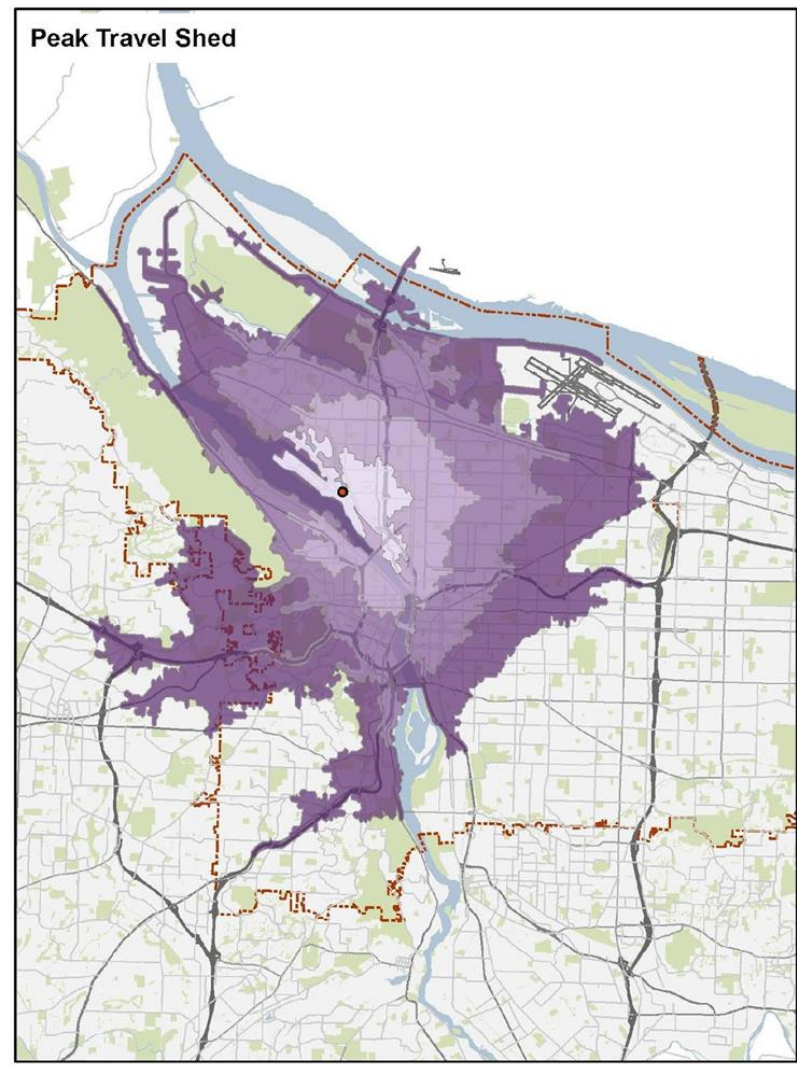
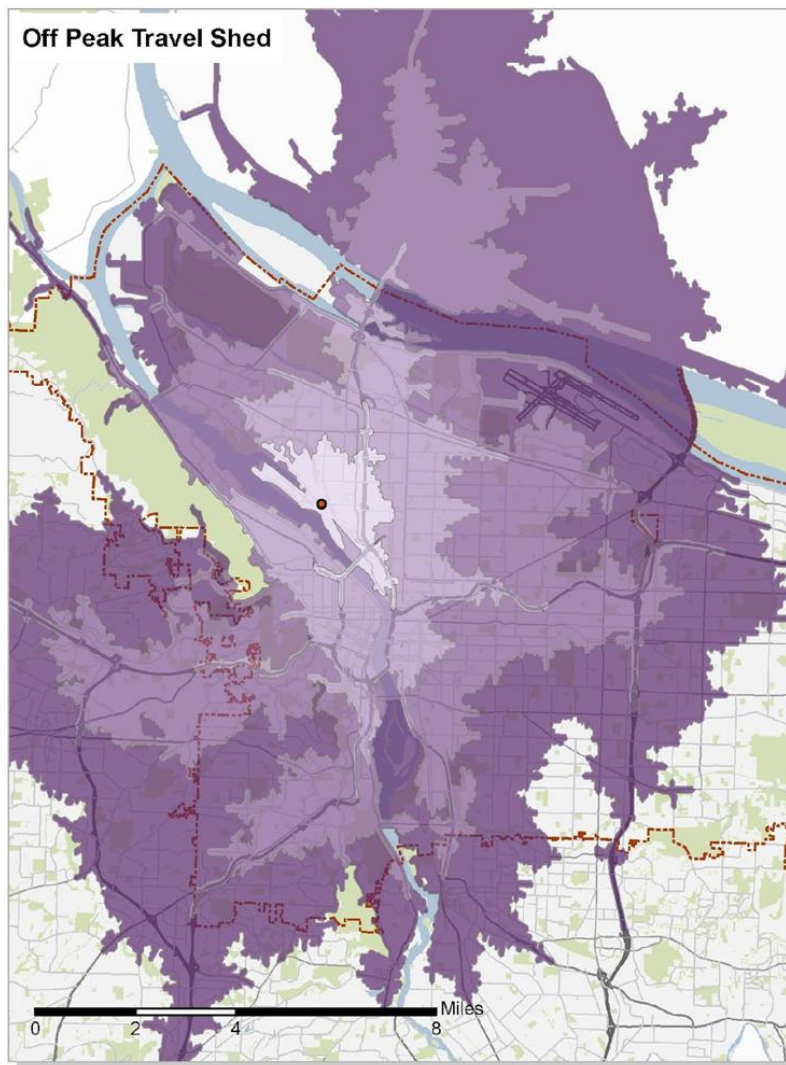


Figure 3-20

Truck Travel Sheds Swan Island Industrial District

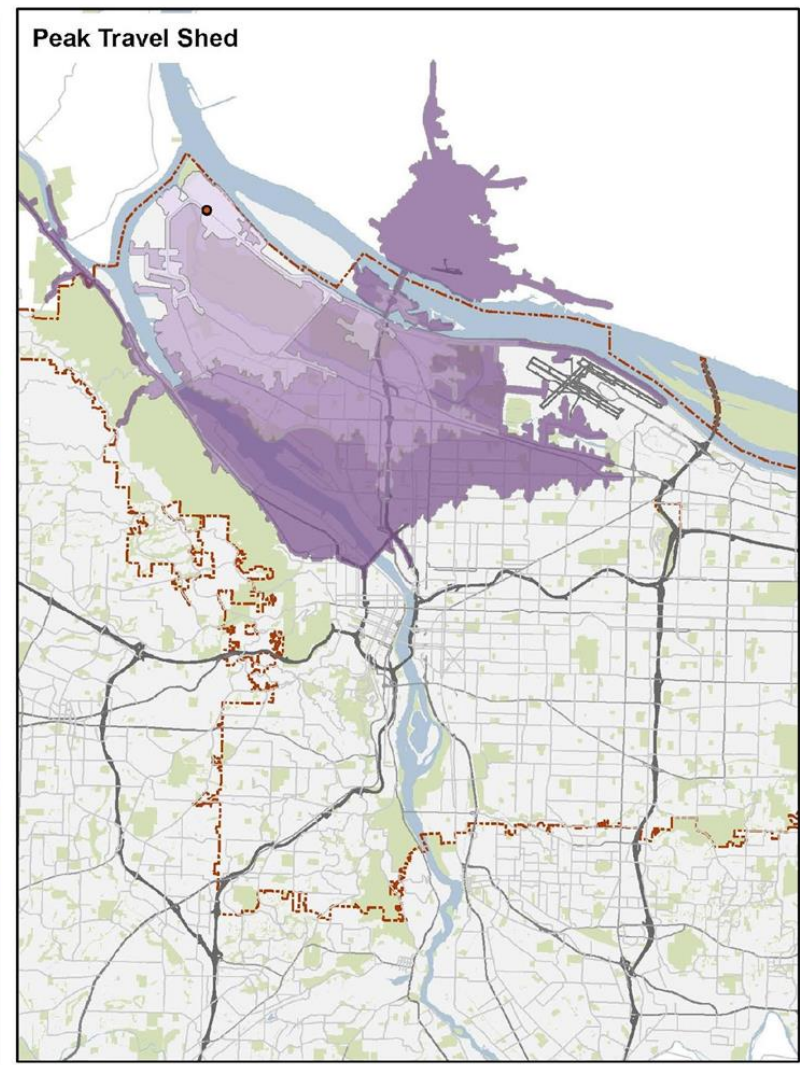
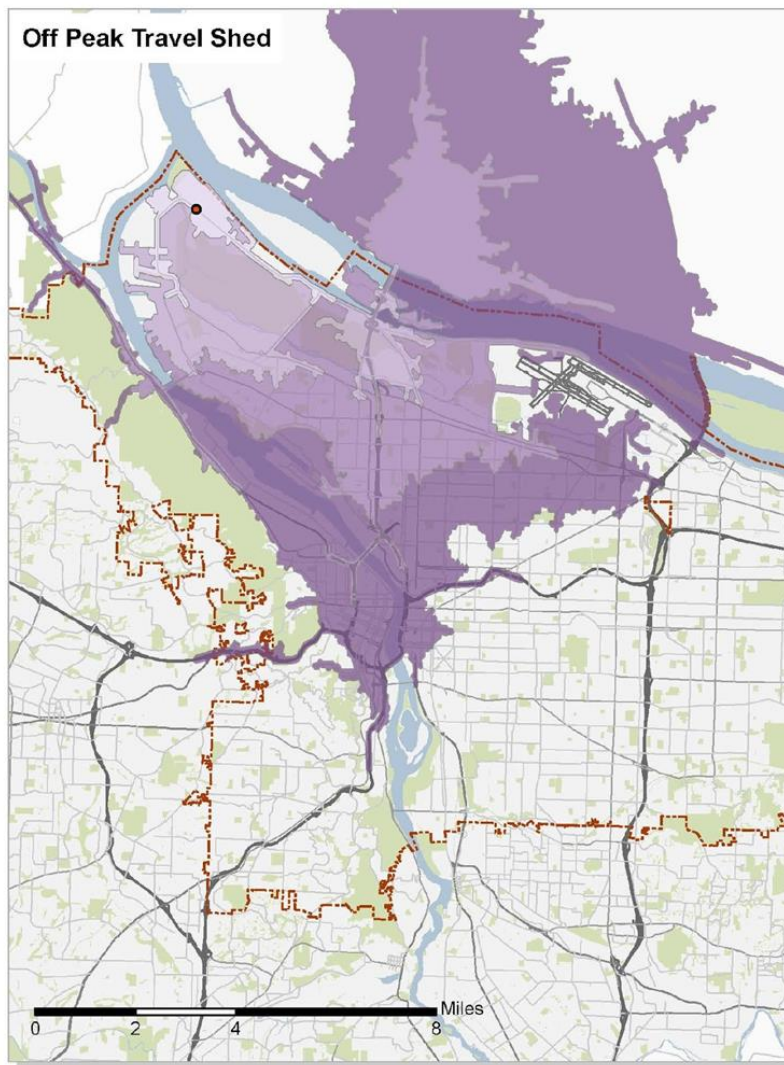


Figure 3-21

Truck Travel Sheds Terminal 6

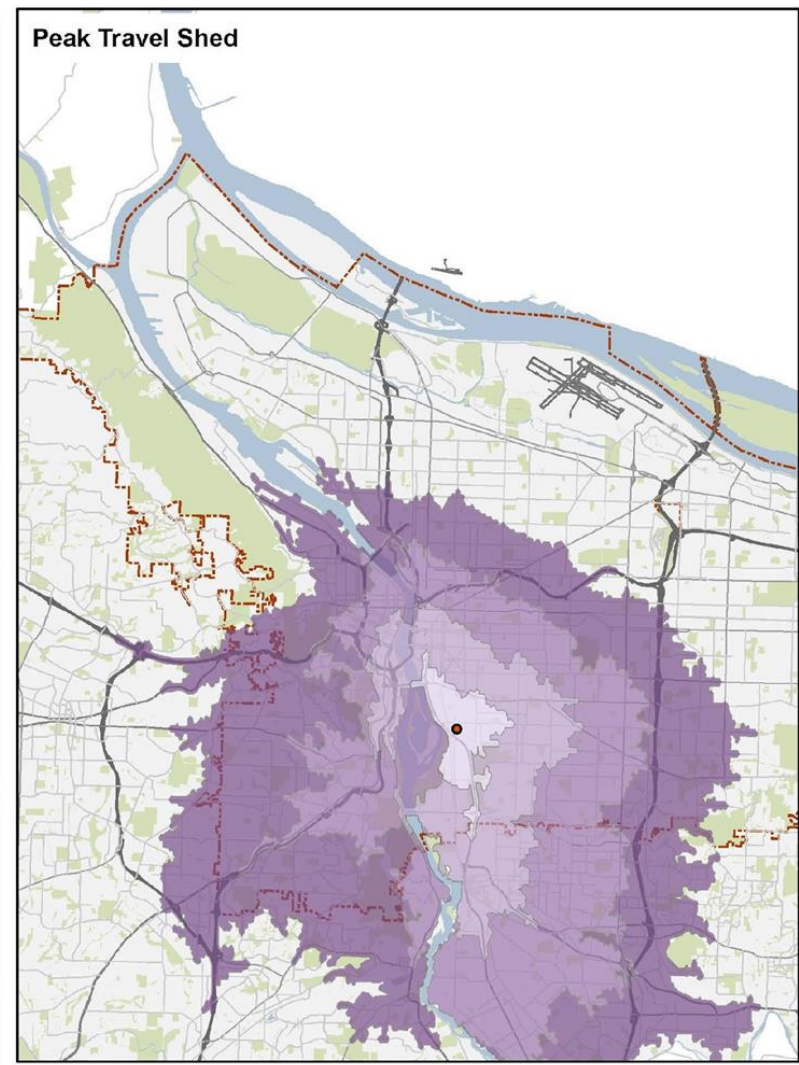
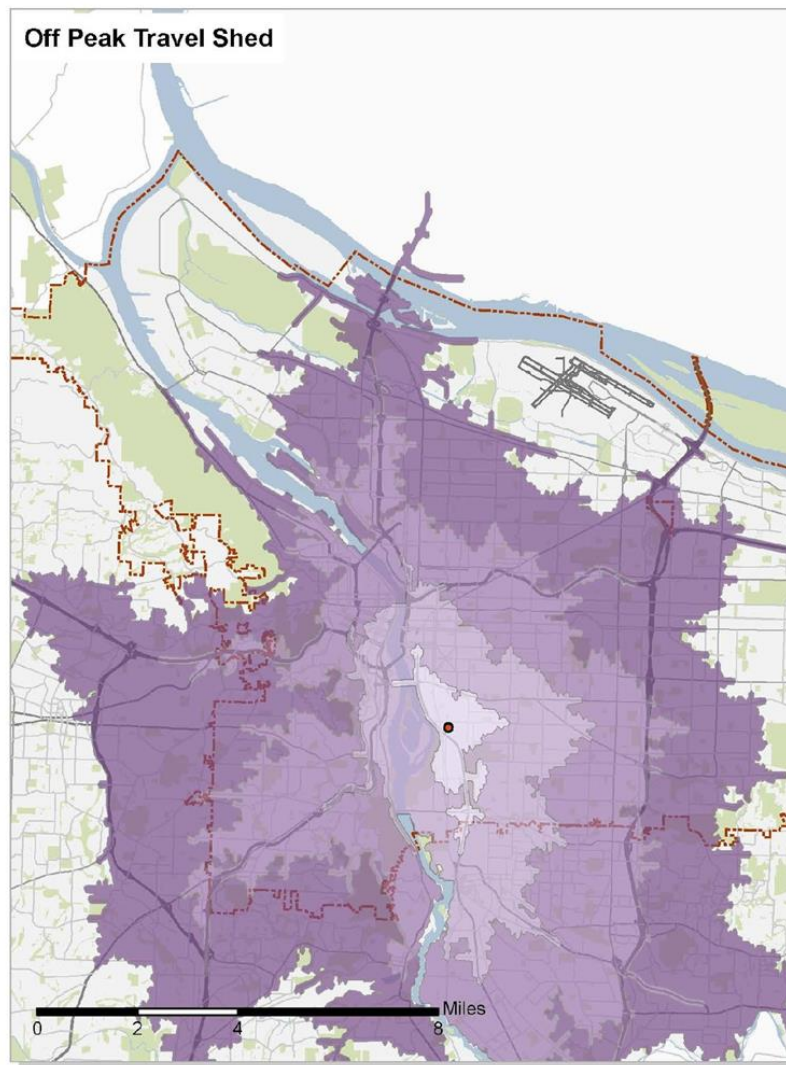


Figure 3-22

Truck Travel Sheds Union Pacific Railyard

Last Mile Delivery

- Online sales increased from 7.2% to 14.3% of retail sales (2015-2020)
- To meet demand for same and 2-day delivery, operations:
 - Added staff
 - Moved closer to consumers
 - Increased hand offs and modes
- Increased competition for curb-space
- More neighborhood deliveries
- Overall increase in truck trips and VMT



COVID-19 Impacts on E-commerce

- E-commerce sales increased 41% in 2020 (Jan-Sept); in-store by 2%
- Home delivery and remote work trends radically accelerated
- Less competition for curb-space
- More neighborhood delivery
- Unclear the degree to which trends will be sustained, post-COVID



High Truck Activity, Congestion and/or Delay

- **N Portsmouth Ave** (N Lombard St - Columbia Blvd)
- **SE Milwaukie Ave** (Powell Blvd- Holgate Blvd)
- **N Marine Dr** east of MLK
- **W Burnside Rd** (west City boundary to I-405)
- **SW 30th Ave** (Beaverton Hillsdale Hwy - SW Vermont St)
- **N Willamette Blvd**
- **N Greeley Ave**
- **N Peninsular Ave**
- **NE Prescott St** (102nd Ave - 122nd Ave)
- **NE Shaver St** (NE 122nd Ave - Sandy Blvd)
- **Sellwood Bridge** and **SE Tacoma Street**
- **SW Terwilliger Blvd/OHSU**
- **SE Powell Blvd/McLoughlin Blvd**

